Reves 09/659,643

11/06/2003

#### => d ibib abs hitstr l17 1-15

L17 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2003 ACS 2003:376271 HCAPLUS ACCESSION NUMBER:

TITLE:

Methods for the detection, analysis and isolation of nascent proteins by labeling with reporter dyes using an aminoacyl-tRNA charged with a dye-conjugated amino

acid

INVENTOR(S):

Rothschild, Kenneth J.; Gite, Sadanand; Olejnik, Jerzy

PATENT ASSIGNEE(S):

SOURCE:

Ambergen, Inc. USA U.S. Pat. Appl. Publ., 76 pp., Cont.-in-part of U.S.

Ser. No. 49,332. CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.		KINI	D DAT	DATE		APPLICATION NO.						DATE				
US 200309	92031	A1	200	30515					7436	-	2002		1			
US <b>(</b> 630662	28 🔿	В1	200	11023		U:	S 19	99-3	3273	6	1999	<u> </u>				
WO 200101	14578	Ą1	200	10301		W	200	00-U	S232	33	2000	0823	~			
W: A	AE, AG,	AL, A	AM, AT	, AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
(	CR, CU,	CZ, [	DE, DK	, DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,		
H	HU, ID,	IL, I	IN, IS	, JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,		
I	LU, LV,	MA, N	MD, MG	, MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,		
Ş	SD, SE,	SG, S	SI, SK	, SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	ŲΖ,	VN,		
· ·	YU, ZA,	ZW, A	AM, AZ	, BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM						
RW: (	GH, GM,	KE, I	LS, MW	, MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,		
1	DE, DK,	ES, E	FI, FR	, GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,		
(	CF, CG,	CI, C	CM, GA	, GN,	G₩,	ML,	MR,	NE,	SN,	TD,	TG					
PRIORITY APPL	N. INFO	. :				US 1	999-:	3827.	36	A1	1999	0825				
					,	WO 2	000-1	US23:	233	W	2000	0823				
						US 2	002-	4933	2	A2	2002	0621				
						US 1	999-	3829	50	Α	1999	0825				

A non-radioactive method of detection and anal. of nascent proteins AΒ translated within cellular or cell-free translation systems by labeling the nascent protein with a reporter dye is described. The core method involves charging a tRNA with an amino acid conjugated with a powerful fluorescent, preferably a deriv. of BODIPY (4,4-difluoro-4-bore-3a,4adiaza-s-indacene). Alternatively, protein synthesis can be monixred by incorporating a dye-binding peptide into a protein. Binding of the dye to the protein, with a change in its spectral properties, can be used to monitor protein synthesis. Nascent proteins contg. these markers can be rapidly and efficiently detected, isolated and analyzed without the handling and disposal problems assocd. with radioactive reagents. Chem. synthesis of misaminoacylated tRNA-Lys by partial degrdn. of the 3'-end and resynthesis is demonstrated. The amino acid was also labeled with a photolabile biotin that allowed rapid recovery of the protein from cell-free translation with immobilized streptavidin. Lower limits of detection were in the range 0.3-10 ng protein.

#### IT524698-42-8

RL: ANT (Analyte); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(detection in nascent proteins of; methods for detection, anal. and isolation of nascent proteins by labeling with reporter dyes using aminoacyl-tRNA charged with dye-conjugated amino acid)

524698-42-8 HCAPLUS RN

CN 16-Oxa-6,13,18-triazatetracosan-24-oic acid, 23-amino-1-[(3aS,4S,6aR)- hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15-(2-nitrophenyl)-5,12,17-trioxo-, (23S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

L17 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2003:77534 HCAPLUS

DOCUMENT NUMBER:

138:142467

TITLE:

Compositions and methods for enhancing drug delivery

across and into ocular tissues

INVENTOR(S):

Rothbard, Jonathan B.; Wender, Paul A.; McGrane

Leo; Sista, Lalitha V. S.; Kirschberg, Thorsten A.

PATENT ASSIGNEE(S):

Cellgate, Inc. A Delaware Corporation, USA

SOURCE:

U.S. Pat. Appl. Publ., 64 pp., Cont.-in-part of U.S.

Ser. No. 792,480.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003022831	A1	20030130	US 2002-83960	20020225
US 2002127198	A1	20020912		20010223
PRIORITY APPLN. INFO.	:		US 1999-150510P (P	19990824
			US 2000-648400 A2	20000824
			US 2001-792480 . A2	20010223

OTHER SOURCE(S): MARPAT 138:142467

AB This invention provides compns. and methods for enhancing delivery of drugs and other agents across epithelial tissues, including into and across ocular tissues and the like. The compns. and methods are also useful for delivery across endothelial tissues, including the blood brain

barrier. The compns. and methods employ a delivery-enhancing transporter that has sufficient guanidino or amidino side chain moieties to enhance delivery of a compd. conjugated to the reagent across one or more layers of the tissue, compared to the non-conjugated compd. The delivery-enhancing polymers include, for example, polyarginine mols. that are preferably between about 6 and 25 residues in length.

IT 455282-37-8P 455282-38-9P 455282-39-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(delivery-enhancing transporters for drug delivery across and into ocular tissues)

RN 455282-37-8 HCAPLUS

CN L-Lysinamide, N2-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

RN 455282-38-9 HCAPLUS

CN L-Lysinamide, N2-[6-[[5-[(3aS, 4S, 6aR)-hexahydro-2-oxo-1H-thieno[3, 4-d]imidazol-4-yl]-l-oxopentyl]amino]-l-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R, 2S)-2-(benzoylamino)-1-[[(2aR, 4S, 4aS, 6R, 9S, 11S, 12S, 12aR, 12bS)-6, 12b-bis(acetyloxy)-12-(benzoyloxy)-2a, 3, 4, 4a, 5, 6, 9, 10, 11, 12, 12a, 12b-dodecahydro-4, 11-dihydroxy-4a, 8, 13, 13-tetramethyl-5-oxo-7, 11-methano-1H-cyclodeca[3, 4]benz[1, 2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

RN 455282-39-0 HCAPLUS

CN L-Lysinamide, N2-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[((2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L17 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:696457 HCAPLUS

DOCUMENT NUMBER:

137:237728

TITLE:

Pentide conjugates for enhancing drug delivery across

and into epithelial tissues

INVENTOR(S):

Rothbard, Jonathan B.; Wender, Paul A.; McGrane, P. Leo; Sista, Lalitha V. S.; Kirschberg, Thorsten A.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 80 pp., Cont.-in-part of U.S.

Ser. No. 648,400.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND			ND	DATE APPLICATION NO. DATE															
		2127198 A1 2067917 A1			_	20020912 20020906			US 2001-792480 WO 2002-US5804								:		
	W:	CO, GM, LS, PL,	CR, HR, LT, PT,	CU, HU, LU, RO,	CZ, ID, LV, RU,	DE, IL, MA, SD,	DK, IN, MD, SE,	DM, IS, MG, SG,	DZ, JP, MK, SI,	EC, KE, MN, SK,	EE, KG, MW, SL,	ES, KP, MX, TJ,	FI, KR, MZ, TM,	BZ, GB, KZ, NO, TN,	GD, LC, NZ, TR,	GE, LK, OM, TT,	GH, LR, PH, TZ,	TM	
WO	RW:	GH, CY, BF,	GM, DE, BJ,	KE, DK, CF,	LS, ES, CG,	MW, FI, CI,	MZ, FR, CM,	SD, GB, GA,	SL, GR, GN,	SZ, IE, GQ,	TZ, IT, GW,	UG, LU, ML,	ZM, MC, MR,	KZ, ZW, NL, NE, 2002	AT, PT, SN,	BE, SE,	CH, TR,	IM	
	W: .	CO, GM, LS, PL, UA, GH,	CR, HR, LT, PT, UG, GM,	CU, HU, LU, RO, UZ, KE,	CZ, ID, LV, RU, VN, LS,	DE, IL, MA, SD, YU, MW,	DK, IN, MD, SE, ZA, MZ,	DM, IS, MG, SG, ZM, SD,	DZ, JP, MK, SI, ZW, SL,	EC, KE, MN, SK, AM, SZ,	EE, KG, MW, SL, AZ, TZ,	ES, KP, MX, TJ, BY, UG,	FI, KR, MZ, TM, KG, ZM,	BZ, GB, KZ, NO, TN, KZ, ZW, NL,	GD, LC, NZ, TR, MD, AT,	GE, LK, OM, TT, RU, BE,	GH, LR, PH, TZ, TJ, CH,	TM	

BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003022831 Α1 20030130 US 2002-83960 20020225 US 2003083256 A1 20030501 US 2002-209421 20020730 PRIORITY APPLN. INFO.: US 1999-150510P P 19990824 US 2000-648400 A2 20000824 US 2001-792480 Α 20010223

OTHER SOURCE(S): MARPAT 137:237728

This invention provides compns. and methods for enhancing delivery of drugs and other agents across epithelial tissues, including the skin, gastrointestinal tract, pulmonary epithelium, ocular tissues and the like. The compns. and methods are also useful for delivery across endothelial tissues, including the blood brain barrier. The compns. and methods employ a delivery enhancing transporter that has sufficient guanidino or amidino side-chain moieties to enhance delivery of a compd. conjugated to the reagent across one or more layers of the tissue, compared to the non-conjugated compd. The delivery-enhancing polymers include, for example, poly-arginine mols. that are preferably between about 6 and 25 residues in length. E.g., biotinylated polymers of D-arginine were prepd. and their penetration into the skin of nude mice studied.

IT 455282-37-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(peptide conjugates for enhancing drug delivery across and into epithelial tissues)

RN 455282-37-8 HCAPLUS

CN L-Lysinamide, N2-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

# IT 455282-38-9P 455282-39-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(peptide conjugates for enhancing drug delivery across and into epithelial tissues)

### RN 455282-38-9 HCAPLUS

CN L-Lysinamide, N2-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[((2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

RN 455282-39-0 HCAPLUS

L-Lysinamide, N2-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[((2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L17 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:675821 HCAPLUS

DOCUMENT NUMBER:

137:222033

TITLE:

Compositions and methods for enhancing drug delivery

across and into ocular tissues

INVENTOR(S):

Rothbard, Jonathan B.; Wender, Paul A.; McGrane, P.

Leo, Sista, Lalitha Vs; Kirschberg, Thorsten A.

PATENT ASSIGNEE(S):

2(3).

Cellgate, Inc., USA PCT Int. Appl., 119 pp.

SOURCE: .

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE

APPLICATION NO. DATE

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WO 2002067917
                        Α1
                             20020906
                                             WO 2002-US5804
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ÎD, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                             US 2001-792480
     US 2002127198
                       Α1
                             20020912
                                                               20010223
                                                           A 20010223
PRIORITY APPLN. INFO.:
                                          US 2001-792480
                                          US 1999-150510P
                                                          P 1999/08/24
                                          US 2000-648400
                                                           A2 20000824
OTHER SOURCE(S):
                          MARPAT 137:222033
     Compns. and methods for enhancing delivery of drugs, diagnostic and other
     agents across epithelial tissues, including into and across ocular tissues
     and blood-brain barrier are provided. The compns. and methods employ a
     delivery enhancing transporter that has sufficient quanidino or amidino
     side chain mojeties to enhance delivery of a compd. conjugated to the
     reagent across one or more layers of the tissue, compared to the
     non-conjugated compd. The delivery-enhancing polymers include, for
     example, poly-arginine mols. that are preferably between about 6 and 25
     residues in length. For example; a series of structural characteristics
     including sequence length, amino acid compn., and chirality that influence
     the ability of Tat49-57 to enter cells is identified. These
     characteristics provided the blueprint for the design of a series of novel
     peptoids, of which 17 members were synthesized and assayed for cellular
     uptake. This research established that the peptide backbone and hydrogen
     bonding along that backbone are not required for cellular uptake, that the
     quanidino head group is superior to other cationic subunits, and most
     significantly, that an extension of the alkyl chain between the backbone
     and the head group provides superior transporters. In addn. to better
     uptake performance, these novel peptoids offer several advantages over
     Tat49-57 including cost-effectiveness, ease of synthesis of analogs, and
     protease stability. These features along with their significant water
     soly. (>100 mg/mL) indicate that these novel peptoids could serve as
     effective transporters for the mol. delivery of drugs, drug candidates,
     and other agents into cells.
IT
     455282-37-8P 455282-38-9P 455282-39-0P
     455282-40-3P 455282-41-4P 455282-42-5P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (drug conjugates with peptide transporter contq. amidino or guanidino
        moieties for enhanced delivery across epithelium)
RN
     455282-37-8 HCAPLUS
     L-Lysinamide, N2-[6-[5-(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-
CN
     d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]-D-arginyl-D-arginyl-D-
     arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-
     [[[(2aR, 4S, 4aS, 6R, 9S, 11S, 12S, 12aR, 12bS) - 6, 12b-bis(acetyloxy) - 12-
     (benzoyloxy)-2a, 3, 4, 4a, 5, 6, 9, 10, 11, 12, 12a, 12b-dodecahydro-4, 11-dihydroxy-
     4a, 8, 13, 13-tetramethyl-5-oxo-7, 11-methano-1H-cyclodeca[3, 4]benz[1, 2-b]oxet-
```

Absolute stereochemistry.

9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

RN 455282-38-9 HCAPLUS

L-Lysinamide, N2-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

RN 455282-39-0 HCAPLUS

L-Lysinamide, N2-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-l-oxopentyl]amino]-l-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

RN 455282-40-3 HCAPLUS

CN L-Lysinamide, D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

RN 455282-41-4 HCAPLUS

CN L-Lysinamide, D-arginyl-D-arginyl

PAGE 1-B

PAGE 2-A

|| NH

RN 455282-42-5 HCAPLUS

CN L-Lysinamide, D-arginyl-D-arginyl

Absolute stereochemistry.

PAGE 1-A

### PAGE 1-B

# PAGE 2-A

# PAGE 3-A

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L17 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2003 ACS 2001:265375 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 134:311431 Preparation of novel amino acid-related carbamates and TITLE: ureas Rana, Tariq M.; Hwang, Seongwoo; Tamilarasu, Natarajan INVENTOR(S): University of Medicine and Dentistry of New Jersey, PATENT ASSIGNEE(S): USA PCT Int. Appl., 117 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_ A1 20010412 WO 2000-US27398 20001004 WO 2001025188 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG ↑ / US 2000-679728 20001004 EP 2000-968691 20001004 2000h004 US 6420591/ 20020716 . B1 20020731 EP 1226115 A1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL US 2000-679451 20001004 US 6503713 В1 20030107 JP 2003511362 T2 20030325 JP 2001-528136 20001004 19991004 PRIORITY APPLN. INFO.: US 1999-157646P P WO 2000-US27398 W 20001094 OTHER SOURCE(S): MARPAT 134:311431 Novel carbamates and ureas H-Y-Y-Y-NH2 [each Y is independently a radical NHC\*H[(CH2)mR1]CO, N[(CH2)mR1]CH2CO, or NHC\*H[(CH2)mR1]2H2O2C (Q), where each R1 is independently selected from -NH2, -NHC(:NAVNH2, and -CH2C(:NH)NH2; each m is independently an integer 3-7; each \* is an (R) or (S) chiral center; and with the proviso that at least one Y is a radical having the structure of Q] and their pharmaceutically acceptable salts were prepd. for treating or preventing cancer, inflammation or a viral infection. Thus, H2NCONHCH[(CH2)3NHC(:NH)NH2]CH2NHCONHCH[(CH2)4NH2]CH2NHC ONHCH[(CH2)4NH2]CH2NH2, with the chirality of afginine and lysine, was prepd. and showed Ki = 50 nM for binding to HIV TAR RNA. 334000-12-3P 334000-13-4P 334000-14-5P 334000-15-6P 334000-16-7P 334000-17-8P 334000-18-9P 334000-19-0P 334000-20-3P 334000-21-4P 334000-22-5P 334000-23-6P 334000-24-7P 334000-25-8P 334000-26-9P 334000-27-0P 334000-28-1P 334000-29-2P 334000-64-5P 334000-65-6P 334000-66-7P 334000-67-8P 334000-68-9P 334000-69-0P 334000-70-3P 334000-71-4P 334000-72-5P

334000-73-6P 334000-74-7P 334000-75-8P 334000-76-9P 334000-77-0P 334000-78-1P

# 334000-79-2P 334000-80-5P 334000-81-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amino acid-related carbamates and ureas)

RN 334000-12-3 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2S)-2,6-diaminohexyl ester, (3R,8R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-13-4 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2R)-2,6-diaminohexyl ester, (3R,8R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-14-5 HCAPLUS

CN Carbamic acid, [(1R)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2R)-6-amino-2-[[(2S)-2,6-diamino-1-oxohexyl]amino]hexyl ester (9CI) (CAINDEX NAME)

RN 334000-15-6 HCAPLUS

CN Carbamic acid, [(1R)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2R)-6-amino-2-[[(2R)-2,6-diamino-1-oxohexyl]amino]hexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-16-7 HCAPLUS

CN Carbamic acid, [(1R)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2R)-6-amino-2-[[[(5-aminopentyl)amino]acetyl]amino]hexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $(CH_2)_4$ 
 $R$ 
 $H_1$ 
 $(CH_2)_4$ 
 $R$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 

RN 334000-17-8 HCAPLUS

CN Carbamic acid, [(1R)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2R)-6-amino-2-[[[(7-aminoheptyl)amino]acetyl]amino]hexyl ester (9CI) (CA INDEX NAME)

RN 334000-18-9 HCAPLUS

CN 2,7-Dioxa-5,10-diazaundecan-11-oic acid, 1-amino-4,9-bis(4-aminobutyl)-1,6-dioxo-, (2S)-2-amino-5-[(aminoiminomethyl)amino]pentyl ester, (4R,9R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-19-0 HCAPLUS

CN Carbamic acid, [(1R)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2R)-6-amino-2-[[[(4-aminobutyl)amino]acetyl]amino]hexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$(CH_2)_4$$
  $(CH_2)_4$   $(CH_2)_4$ 

RN 334000-20-3 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2R)-2,5-diamino-5-oxopentyl ester, (3R,8R)- (9CI) (CA INDEX NAME)

$$(CH_2)_4$$
  $(CH_2)_4$   $(CH_2)_4$ 

RN 334000-21-4 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobuty1)-6,11-dioxo-, (2S)-2,6-diaminohexyl ester, (3S,8R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$(CH_2)_4$$
 $(CH_2)_4$ 
 $(CH_2)_4$ 

RN 334000-22-5 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2R)-2,6-diaminohexyl ester, (3S,8R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-23-6 HCAPLUS

CN Carbamic acid, [(1R)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2S)-6-amino-2-[[(2S)-2,6-diamino-1-oxohexyl]amino]hexyl ester (9CI) (CA INDEX NAME)

RN 334000-24-7 HCAPLUS
CN Carbamic acid, [(1R)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-,
(2S)-6-amino-2-[[(2R)-2,6-diamino-1-oxohexyl]amino]hexyl ester (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 334000-25-8 HCAPLUS
CN Carbamic acid, [(1R)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-,
(2S)-6-amino-2-[[[(5-aminopentyl)amino]acetyl]amino]hexyl ester (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

$$(CH_2)_4$$
  $(CH_2)_5$   $(CH_2)_4$   $(CH_2)_5$   $(CH_2)_4$   $(CH_2)_5$   $(CH_2)_4$   $(CH_2)_5$   $(CH_2)_4$   $(CH_2)_5$   $(CH_2)_4$   $(CH_2)_5$   $(CH_2)_4$   $(CH_2)_5$ 

RN 334000-27-0 HCAPLUS

Absolute stereochemistry.

$$H_2N$$
 $(CH_2)_4$ 
 $R$ 
 $H_1$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 

RN 334000-28-1 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2S)-2-amino-5-[(aminoiminomethyl)amino]pentyl ester, (3S,8R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$(CH_2)_4$$
  $(CH_2)_4$   $(CH_2)_4$ 

RN 334000-29-2 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2R)-2,5-diamino-5-oxopentyl ester, (3S,8R)- (9CI) (CA INDEX NAME)

RN 334000-64-5 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2S)-2,6-diaminohexyl ester, (3R,8S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$(CH_2)_4$$
  $(CH_2)_4$   $(CH_2)_4$ 

RN 334000-65-6 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2R)-2,6-diaminohexyl ester, (3R,8S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-66-7 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2R)-6-amino-2-[[(2S)-2,6-diamino-1-oxohexyl]amino]hexyl ester (9CI) (CA INDEX NAME)

RN 334000-67-8 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2R)-6-amino-2-[[(2R)-2,6-diamino-1-oxohexyl]amino]hexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-68-9 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2R)-6-amino-2-[[[(5-aminopentyl)amino]acetyl]amino]hexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $(CH_2)_4$ 
 $S$ 
 $HN$ 
 $(CH_2)_5$ 
 $NH_2$ 
 $(CH_2)_4$ 
 $NH_2$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_5$ 

RN 334000-69-0 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2R)-6-amino-2-[[[(7-aminoheptyl)amino]acetyl]amino]hexyl ester (9CI) (CA INDEX NAME)

RN 334000-70-3 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2R)-6-amino-2-[[[(4-aminobutyl)amino]acetyl]amino]hexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $(CH_2)_4$ 
 $S$ 
 $HN$ 
 $(CH_2)_4$ 
 $NH_2$ 
 $(CH_2)_4$ 
 $NH_2$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 

RN 334000-71-4 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2S)-2-amino-5-[(aminoiminomethyl)amino]pentyl ester, (3R,8S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-72-5 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2R)-2,5-diamino-5-oxopentyl ester, (3R,8S)- (9CI) (CA INDEX NAME)

$$(CH_2)_4$$
  $(CH_2)_4$   $(CH_2)_4$ 

RN 334000-73-6 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2S)-2,6-diaminohexyl ester, (3S,8S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-74-7 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2R)-2,6-diaminohexyl ester, (3S,8S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-75-8 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2S)-6-amino-2-[[(2S)-2,6-diamino-1-oxohexyl]amino]hexyl ester (9CI) (CA INDEX NAME)

RN 334000-76-9 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2S)-6-amino-2-[[(2R)-2,6-diamino-1-oxohexyl]amino]hexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-77-0 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2S)-6-amino-2-[[[(5-aminopentyl)amino]acetyl]amino]hexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $(CH_2)_4$ 
 $S$ 
 $HN$ 
 $(CH_2)_5$ 
 $(CH_2)_4$ 
 $(CH_2)_5$ 
 $(CH_2)_4$ 
 $(CH_2)_5$ 
 $(CH_2)_4$ 
 $(CH_2)_5$ 

RN 334000-78-1 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2S)-6-amino-2-[[[(7-aminoheptyl)amino]acetyl]amino]hexyl ester (9CI) (CA INDEX NAME)

RN 334000-79-2 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[[(aminocarbonyl)oxy]methyl]pentyl]-, (2S)-6-amino-2-[[[(4-aminobutyl)amino]acetyl]amino]hexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $(CH_2)_4$ 
 $H_1$ 
 $(CH_2)_4$ 
 $(CH_2)_4$ 

RN 334000-80-5 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2S)-2-amino-5-[(aminoiminomethyl)amino]pentyl ester, (3S,8S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 334000-81-6 HCAPLUS

CN 5,10-Dioxa-2,7-diazaundecanoic acid, 11-amino-3,8-bis(4-aminobutyl)-6,11-dioxo-, (2R)-2,5-diamino-5-oxopentyl ester, (3S,8S)- (9CI) (CA INDEX NAME)

name inventire en

$$(CH_2)_4$$
  $(CH_2)_4$   $(CH_2)_4$ 

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2003 ACS 2001:208131 HCAPLUS ACCESSION NUMBER:

134:231861 DOCUMENT NUMBER:

Method of potentiating chemotherapy and treating solid TITLE:

tumors

Gibbons, James Joseph, Jr.; Dukart, Gary; Lucas, Judy; INVENTOR(S):

Speicher, Lisa Anne

PCT Int. Appl., 23 pp.

American Home Products Corporation, USA PATENT ASSIGNEE(S):

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DATE PATENT NO. KIND DATE APPLICATION NO. Some \_\_\_\_\_ \_\_\_\_ ----2001/0822 20000912 A2 WO 2000-US25008 WO 2001019399 20011/213 А3 WO 2001019399 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG BR 2000014001 20020521 BR 2000-14001 20000912 Α 20020619 EP 2000-961841 20000912 EP 1214092 Α2 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL-T2 JP 2001-523030 20000912 JP 2003509383 20030311 US 1999-396051 19990915 PRIORITY APPLN. INFO.: A WO 2000-US25008 W 20000912

OTHER SOURCE(S): MARPAT 134:231861

This invention provides a method of treating solid tumors which comprises administering an effective amt. of a combination of (1) a bioresponse modifier and (2) a chemotherapeutic agent. This invention also provides a method of potentiating the effects of a chemotherapeutic regimen in a mammal in need of treatment with such regimen which comprises administering a bioresponse modifier in addn. to a chemotherapeutic regimen. The potentiating effect of the bioresponse modifier

 $[R-(R^*,R^*)]-N-[R-6-carboxy-N2-[[2-carboxy-1-methyl-2-[(1-rarboxy$ 

oxoheptyl)aminolethoxylcarbonyll-L-lysyllalanine and paclitaxel was demonstrated in mice.

IT 160705-84-0

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(potentiating chemotherapy and treating solid tumors)

160705-84-0 HCAPLUS RN.

D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with CN N-(1-oxoheptyl)-D-allothreonine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCAPLUS COPYRIGHT 2003 ACS L17 ANSWER 7 OF 15

2001:177403 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

135:28708

TITLE:

Targeting RNA with peptidomimetic oligomers in human

cells

AUTHOR (S):

Tamilarasu, N.; Huq, I.; Rana,

CORPORATE SOURCE:

Department of Pharmacology, Robert Wood Johnson Medical School, and Molecular Biosciences Graduate Program at Rutgers State University, Piscataway, NJ,

08854, USA

SOURCE:

Bioorganic & Medicinal Chemistry Letters

11(4), 505-507

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Replication of human immunodeficiency virus type 1 (HIV-1) require specific interactions of Tat protein with the trans-activation responsive region (TAR) RNA, a 59-base stem-loop structure located at the 5'-end of all HIV mRNAs. Here we report that two TAR RNA-binding peptidomimetics, oligourea and oligocarbamate, inhibit transcriptional activation by Tat protein in human cells with an IC50 of .apprx.0.5 and 1 .mu.M, resp. Peptidomimetics that can target specific RNA structures provide novel mols. that can be used to control cellular processes involving protein-RNA interactions in vivo. Replication of human immunodeficiency virus type 1 (HIV-1) requires specific interactions of Tat protein with the trans-activation responsive region (TAR) RNA, a stem-loop structure located at the 5'-end of all HIV mRNAs. Here we report that two TAR RNA-binding peptidomimetics, oligourea and oligocarbamate, inhibit transcriptional activation by Tat protein in human cells with an IC50 of 0.5 and .apprx.1.0 .mu.M, resp. Peptidomimetics that can target specific

PAGE 1-A

CH2)4

NH<sub>2</sub>

RNA structures provide novel mols. that can be used to control cellular processes involving protein-RNA interactions in vivo.

IT 343944-29-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(targeting RNA with peptidomimetic oligomers in human cells)

RN 343944-29-6 HCAPLUS

CN L-Arginine, N44-L-tyrosyl-(4S,9S,14S,19S,24S,29S,34S,39S)-44-amino-29,34-bis(4-aminobutyl)-4,9,19,24,39-pentakis[3-[(aminoiminomethyl)amino]propyl]-14-(3-amino-3-oxopropyl)-6,11,16,21,26,31,36,41-octaoxo-2,7,12,17,22,27,32,37,42-nonaoxa-5,10,15,20,25,30,35,40-octaazatetratetracontanoyl- (9CI) (CA INDEX NAME)

PAGE 1-C

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22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2003 ACS 2001:152863 HCAPLUS ACCESSION NUMBER: '

DOCUMENT NUMBER:

134:204756

TITLE:

Methods for the detection, analysis and isolation of

nascent proteins

INVENTOR(S):

Rothschild, Kenneth J.; Gite, Sadanand; Olejnik, Jerzy

Ambergen, Inc. USA PATENT ASSIGNEE(S): PCT Int. Appl., 204 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                     KIND
                           DATE
                                          APPLICATION NO. DATE
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                                          WO 2000-US23233 2000/08/23
    WO 2001014578
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PRIORITY APPLN. INFO.:
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                                                      - A 19990825
                                       US 1999-382950
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                                       WO 2000-US23233
                                                        W 20000823
                                       US 2002-49332
                                                        A2 20020621
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- AB This invention relates to non-radioactive markers that facilitate the detection and anal. of nascent proteins translated within cellular or cell-free translation systems. Nascent proteins contg. these markers can be rapidly and efficiently detected, isolated and analyzed without the handling and disposal problems assocd. with radioactive reagents. Preferred markers are dipyrrometheneboron difluoride (4,4-difluoro-4-bora-3a,4a-diaza-s-indacene) dyes.
- IT 328387-26-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (methods for detection, anal. and isolation of nascent proteins)

RN 328387-26-4 HCAPLUS

CN 10-Oxa-2,8,13,20-tetraazapentacosanoic acid, 3-carboxy-25-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-11-(2-nitrophenyl)-9,14,21-trioxo-, 1-(9H-fluoren-9-ylmethyl) ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2000:220895 HCAPLUS

DOCUMENT NUMBER:

133:120610

TITLE:

Design and synthesis of novel antimicrobial

Reves 09/659,643

pseudopeptides with selective membrane-perturbation activity

AUTHOR(S):

Lee, K.-H.; Oh, J.-E.

CORPORATE SOURCE:

Protein Chemistry Laboratory, Mogam Biotechnology

Research Institute, Kyonggi-Do, S. Korea

Bdoorganic & Medicinal Chemistry (2000) 8(4), 833-839

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

SOURCE:

English

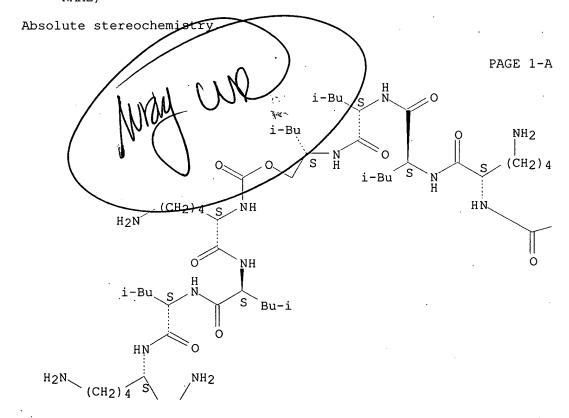
AB By incorporating carbamate bond(s) into a cytolytic peptide, novel pseudopeptides with potent antibacterial activity and low hemolytic activity were synthesized. CD spectra suggested that the incorporation of carbamate bond(s) decrease the .alpha .- helical conformation of the peptide in lipid membrane circumstances, which must be regarded as a major factor for the sepn. of antibacterial activity from cytotoxic activity for mammalian cell. Expts. in which dye was released from vesicles indicated that the potent antibacterial activity and low hemolytic activity of the pseudopeptides must be due to their great lipid membrane selectivity.

IT 284680-90-6P

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process) (design and synthesis of antimicrobial pseudopeptides with selective membrane-perturbation activity)

284680-90-6 HCAPLUS RN

L-Lysinamide, N-[[(2S)-2-[[N-[[(2S)-2-[(L-lysyl-L-leucyl)amino]-4-CN methylpentyl]oxy]carbonyl]-L-leucyl-L-lysyl-L-leucyl-L-leucyl]amino]-4methylpentyl]oxy]carbonyl]-L-lysyl-L-leucyl-L-leucyl- (9CI) (CA INDEX NAME)



PAGE 1-B

PAGE 2-A

REFERENCE COUNT:

43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2003 ACS L17 ANSWER 10 OF 15

ACCESSION NUMBER:

1999:414234 HCAPLUS

DOCUMENT NUMBER:

131:193710

TITLE:

Cyclic and linear oligocarbamate ligands for human

AUTHOR(S):

Cho, Charles Y.: Liu, Corey W.; Wemmer, David E.;

Schultz, Peter G.

CORPORATE SOURCE:

Department of Chemistry, University of California,

Berkeley CA, 94720, USA

SOURCE:

(Bioorganic & Medicinal Chemistry (1999), 7(6),

1171-1179

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal LANGUAGE: English

Several classes of compds. have been tested as potential inhibitors of the serine protease thrombin, an important regulator of blood coagulation cascades. The authors describe here the discovery of a new class of thrombin inhibitors based on an unnatural carbamate biopolymer. Oligocarbamate thrombin inhibitors were identified through the screening of diverse cyclic trimer, cyclic tetramer, and linear tetramer libraries using the one bead, one peptide method. Whereas the cyclic trimer oligocarbamate ligands bound thrombin with modest affinity, a cyclic tetramer oligocarbamate inhibited thrombin with an apparent Ki of 31 nM. Linear oligocarbamate tetramers bound thrombin with inhibition consts. in the 100-nM range. These nonpeptidic, oligomeric mols. may provide the basis for further drug development and studies of thrombin-ligand interactions.

213120-37-7 241496-02-6 241496-04-8 ΙT

## 241496-06-0 241496-08-2 241496-09-3 241496-11-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cyclic and linear peptide oligocarbamate ligands for human thrombin in relation to structure)

RN 213120-37-7 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[(5S,10S)-18-amino-10-[4-[(aminoiminomethyl)amino]butyl]-5-(cyclohexylmethyl)-3,8,13,18-tetraoxo-2,7,12,17-tetraoxa-4,9,14-triazaoctadec-1-yl]-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 241496-02-6 HCAPLUS

CN 5,10-Dioxa-2,7,12-triazahexadecanedioic acid, 13[[(aminocarbonyl)oxy]methyl]-8-[4-[(aminoiminomethyl)amino]butyl]-3(cyclohexylmethyl)-6,11-dioxo-, 1-[[(2S)-1-(methoxycarbonyl)-2pyrrolidinyl]methyl] ester, (3S,8S,13S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 241496-04-8 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[(5S,10S)-18-amino-10-[4-[(aminoiminomethyl)amino]butyl]-5-[(4-methoxyphenyl)methyl]-3,8,13,18-tetraoxo-2,7,12,17-tetraoxa-4,9,14-triazaoctadec-1-yl]-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

RN 241496-06-0 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[(5S,10S)-18-amino-10-[4-[(aminoiminomethyl)amino]butyl]-3,8,13,18-tetraoxo-5-(phenylmethyl)-2,7,12,17-tetraoxa-4,9,14-triazaoctadec-1-yl]-, methyl ester, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 241496-08-2 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[(5S,10S)-18-amino-10-[4-[(aminoiminomethyl)amino]butyl]-5-[(4-nitrophenyl)methyl]-3,8,13,18-tetraoxo-2,7,12,17-tetraoxa-4,9,14-triazaoctadec-1-yl]-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

RN 241496-09-3 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[(5S,10S)-16-amino-10-[(aminocarbonyl)oxy]methyl]-16-imino-5-[(4-methoxyphenyl)methyl]-3,8dioxo-2,7-dioxa-4,9,15-triazahexadec-1-yl]-, (2S)-4-carboxy-2-[(methoxycarbonyl)amino]butyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

241496-11-7 HCAPLUS RN

5,10,15-Trioxa-2,7,12,17,23-pentaazatetracosanoic acid, CN 24-amino-18-[[(aminocarbonyl)oxy]methyl]-3-[3-[(aminoiminomethyl)amino]propyl]-24-imino-8-methyl-13-(1-methylethyl)-6,11,16-trioxo-, methyl ester, (3S,8S,13S,18S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

OMe

REFERENCE COUNT:

THÉRE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 11 OF 15 ACCESSION NUMBER: DOCUMENT NUMBER:

28

HCAPLUS COPYRIGHT 2003 ACS 998:507680 \*KCAPLUS 189:245467

TITLE: Oligocarbamates as MHC class I ligands

AUTHOR(S): Warrass, Ralf; Walden, Peter; Wiesmuller, Karl-Heinz;

Jung, Gunther

CORPORATE SOURCE: Institut fur Organische Chemie, Tubingen, D-72076,

Germany

SOURCE: Letters in Peptide Science (1998), 5(2-3), 125-128

CODEN: LPSCEM; ISSN: 0929-5666

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal LANGUAGE: English

New ligands for major histocompatibility complex (MHC) class I mols. were prepd. using a flexible automated synthesis of oligocarbamates. An efficient soln.-phase synthesis was found for Fmoc-amino alcs. (Fmoc = 9-fluorenylmethoxycarbonyl) which are required as building blocks. The biol. activity of the oligomeric peptidomimetics H-[NHCH(R)CH2OCO]4NHCH(CH3)CO2H (R = amino acid side chain) was demonstrated

in a stabilizing assay with MHC class I presenting cells.

IT 213336-26-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. of peptidomimetics in the form of oligocarbamates as MHC class I ligands)

RN 213336-26-6 HCAPLUS

CN 5,10,15-Trioxa-2,7,12,17-tetraazanonadecanedioic acid,
13-(4-aminobutyl)-3-(2-amino-2-oxoethyl)-18-methyl-6,11,16-trioxo-8(phenylmethyl)-, 1-[(2S)-2-amino-3-hydroxypropyl] ester, (3S,8S,13S,18K)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

CO2H

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1998:496513 HCAPLUS

DOCUMENT NUMBER: 129:245454

TITLE: Synthesis and Screening of Linear and Cyclic

Oligocarbamate Libraries. Discovery of High Affinity

Ligands for GPIIb/IIIa

AUTHOR(S): Cho, Charles Y.; Youngquist, R. Scott; Paikoff, Sari

J.; Beresini, Maureen H.; Hebert, Andrea R.; Berleau,

Lea T.; Liu, Corey W.; Wemmer, David E.; Keough,

Thomas; Schultz, Peter G.

CORPORATE SOURCE: Department of Chemistry and Howard Hughes Medical

Institute, University of California, Berkeley, CA,

94720-1460, USA

SOURCE: Journal of the American Chemical Society (1998),

120(31), 7706-7718

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB Synthetic methodol. has been developed for the generation of large, diverse libraries of "unnatural" carbamate oligomers using the "one bead, one peptide" method. Using a pool of 27 structurally and functionally diverse monomers, one acyclic and two cyclic libraries were synthesized and screened for binding to the integrin GPIIb/IIIa. Several classes of oligocarbamate ligands for GPIIb/IIIa were discovered, and two cyclic ligands have activities that are within a factor of 3 of kistrin, a snake venom protein that effectively inhibits platelet aggregation. Preliminary pharmacokinetic characterization was performed on a linear oligocarbamate ligand, which was cleared from plasma with a half-life of 3.6 min.

IT 213120-28-6P 213120-29-7P 213120-32-2P 213120-33-3P 213120-35-5P 213120-36-6P

213120-37-7P
RL: BAC (Biological activity or effe

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and screening of linear and cyclic oligocarbamate combinatorial libraries for discovery of high affinity ligands for GPIIb/IIIa)

RN 213120-28-6 HCAPLUS

PAGE 1-A

PAGE 1-B

OMe

\_\_ CO2H

RN 213120-29-7 HCAPLUS

CN 5,10,15-Trioxa-2,7,12,17,22-pentaazatricosanoic acid, 23-amino-18-[[(aminocarbonyl)oxy]methyl]-13-[4-[(aminoiminomethyl)amino]butyl]-8-(carboxymethyl)-23-imino-3-methyl-6,11,16-trioxo-, 1-methyl ester, (3S,8R,13S,18S)- (9CI) (CA INDEX NAME)

ΝH

PAGE 1-A

PAGE 1-B

\_NH2

RN 213120-32-2 HCAPLUS

CN 5,10,15-Trioxa-2,7,12,17-tetraazaeicosanedioic acid, 18[[(aminocarbonyl)oxy]methyl]-13-[4-[(aminoiminomethyl)amino]butyl]-3,8bis[3-[(aminoiminomethyl)amino]propyl]-6,11,16-trioxo-, 1-methyl ester,
(3S,8S,13S,18R)- (9CI) (CA INDEX NAME)

RN 213120-33-3 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[(5S,10S)-16-amino-10[[(aminocarbonyl)oxy]methyl]-5-[2-[(aminoiminomethyl)amino]ethyl]-16-imino3,8-dioxo-2,7-dioxa-4,9,15-triazahexadec-1-yl]-, (2R)-3-carboxy-2-

[(methoxycarbonyl)amino]propyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

NH2

RN 213120-35-5 HCAPLUS CN 5,10-Dioxa-2,7,12-triazapentadecanedioic acid, 13-[[[[(1S)-1[[(aminocarbonyl)oxy]methyl]-5-[(aminoiminomethyl)amino]pentyl]amino]carbonyl]oxy]methyl]-3,8-bis[3-[(aminoiminomethyl)amino]propyl]-6,11-dioxo-,1-methyl ester, (3S,8R,13R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

OMe

RN 213120-36-6 HCAPLUS

CN 5,10-Dioxa-2,7,12-triazapentadecanedioic acid, 13-[[[[(1S)-1-[(aminocarbonyl)oxy]methyl]-5-[(aminoiminomethyl)amino]pentyl]amino]carbonyl]oxy]methyl]-3,8-bis[3-[(aminoiminomethyl)amino]propyl]-6,11-dioxo-,1-methyl ester, (3S,8S,13R)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

OMe

RN 213120-37-7 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[(5S,10S)-18-amino-10-[4-[(aminoiminomethyl)amino]butyl]-5-(cyclohexylmethyl)-3,8,13,18-tetraoxo-2,7,12,17-tetraoxa-4,9,14-triazaoctadec-1-yl]-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1997:436038 HCAPLUS

DOCUMENT NUMBER:

127:91798

TITLE:

SOURCE:

PUBLISHER:

HIV-1 TAR RNA recognition by an unnatural biopolymer

Wang, Xilu; Huq, Ikramul; Rana, Tariq M.

AUTHOR (S): CORPORATE SOURCE:

Department of Pharmacology Robert Wood Johnson

(Rutgers) Medical School, University of Medicine

Dentistry of New Jersey, Piscataway, NJ, 08854, USA

Journal of the American Chemical Socjety

119(27), 6444-6445

CODEN: JACSAT; ISSN: 0002-7863

American Chemical Society

DOCUMENT TYPE:

Journal

English LANGUAGE:

Replication of human immunodeficiency virus type 1 (HIV-1) requires AR specific interactions of Tat protein with the trans-activation responsive region (TAR) RNA, a 59-base stem-loop structure located at the 5'-end of all HIV mRNAs. We synthesized an oligocarbamate contg. the basic-arginine rich region of Tat (47Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg57) by solid phase peptide synthesis methods, and tested for TAR RNA binding. This Tat protein-derived unnatural biopolymer can specifically bind TAR RNA with high affinities. Site-specific photocrosslinking expts. using photoactive analog (4-thiouracil) contg. TAR RNA revealed that the unnatural biopolymer interacts with RNA in the major groove. oligocarbamate-RNA complexes were stable to proteolytic digestion recognition by an unnatural biopolymer provides a new approach for the design of cell-permeable mols. for the control of cellular processes involving RNA-protein interactions in vivo.

ΤT 192193-77-4

> RL: BPR (Biological process); BSU (Biological study, unc/assified); BIOL (Biological study); PROC (Process)

(TAR RNA binding by; HIV-1 TAR RNA recognition by and unnatural oligocarbamate biopolymer corresponding to basic arginine-rich region of Tat protein)

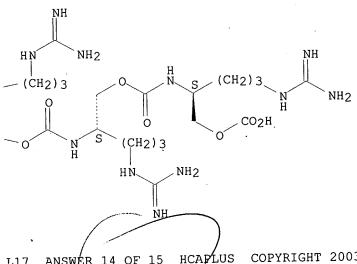
192193-77-4 HCAPLUS RN

2,7,12,17,22,27,32,37,42,47,52-Undecaoxa-5,10,15,20,25,30,35,40,45,50-CN decaazapentapentacontanoic acid, 54-amino-34,39-bis(4-aminobutyl)-9,14,24,29,44-pentakis[3-[(aminoiminomethyl)amino]propyl]-19-(3-amino-3oxopropyl)-55-(4-hydroxyphenyl)-6,11,16,21,26,31,36,41,46,51-decaoxo-, [4S-(4R\*,9R\*,14R\*,19R\*,24R\*,29R\*,34R\*,39R\*,44R\*,54R\*)]- (9CI) NAME)

Absolute stereochemistry.

PAGE 1-A

## PAGE 1-C



HCAPLUS COPYRIGHT 2003 ACS L17 ANSWER 14 OF 15 1995:324507 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

122:106538

TITLE:

Preparation of peptide urethane and urea derivatives

that induce cytokine production

INVENTOR(S):

Ayral-Kaloustian, Semiramis; Schow, Steven R.; Du, Mila T.; Gibbons, James J., Jr.

PATENT ASSIGNEE(S):

SOURCE:

American Cyanamid Co., USA

U.S., 25 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND

DATE

APPLICATION NO.

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US 5312831
                              19940517
                                              US 1993-63174
                                                                19930512
                        Α
     US 5545662
                              19960813
                                              US 1994-213303
                                                                19940314
                        Α
     EP 652228
                        Α1
                              19950510
                                              EP 1994-106123
                                                                19940420
                              19961023
     EP 652228
                        В1
                      CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
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                                                             A3 19930512
PRIORITY APPLN. INFO.:
                                           US 1994-213303
                                                             A3 19940314
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OTHER SOURCE(S):

MARPAT 122:106538

GΙ

Title compds. [I; R1, R3, Ra = H, (substituted) alkyl, cycloalkyl, cycloalkylalkyl, vinyl, acetylene, amino, acylamino, aryl, aralkyl, aryloxy, heterocyclyl, etc.; R2, Rb, Rc = (protected) carboxy, carboxylalkyl, carboxamide; X = O, S; R4 = H, protecting group], were prepd. Thus, [R-(R\*,R\*)]-N-(R)-6-carboxy-N2-[[2-carboxy-1-methyl-2-[(1-oxoheptyl)amino]ethoxy]carbonyl]lysyl-D-alanine (soln. phase prepn. given) at 0.1 mg/kg s.c. in mice induced 4802 U/mL of IL-6. I may be useful in the treatment of cancer, AIDS, aplastic anemia, myelodysplastic syndrome, infectious disease, and in the enhancement of immune response.

IT 160578-69-8P 160578-70-1P 160578-71-2P 160578-72-3P 160578-73-4P 160579-15-7P 160579-16-8P 160579-17-9P 160579-18-0P 160705-77-1P 160705-78-2P 160705-79-3P 160705-81-7P 160705-82-8P 160705-83-9P 160705-84-0P 160705-85-1P 160705-86-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, for induction of cytokine prodn.)

RN 160578-69-8 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-(1-oxoheptyl)-D-threonine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160578-70-1 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-(1-oxoheptyl)-D-serine (9CI) (CA INDEX NAME)  $\dot{}$ 

Absolute stereochemistry.

RN 160578-71-2 HCAPLUS ·

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-[(4-pentylcyclohexyl)carbonyl]-L-threonine, (trans)- (9CI) (CA INDEX NAME)

$$HO_2C$$
 $R$ 
 $HO_2C$ 
 $HO_2C$ 

RN 160578-72-3 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-[(4-butoxyphenyl)acetyl]-L-threonine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160578-73-4 HCAPLUS

Absolute stereochemistry.

$$HO_2C$$
 $R$ 
 $HO_2C$ 
 $HO_2C$ 

RN 160579-15-7 HCAPLUS

CN D-Allothreonine, N-(1-oxoheptyl)-, phenylmethyl ester,

## Absolute stereochemistry.

RN 160579-16-8 HCAPLUS

CN D-Serine, N-(1-oxoheptyl)-, phenylmethyl ester, [1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6-(phenylmethoxy)-5[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester),
[1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160579-17-9 HCAPLUS

CN D-Allothreonine, N-[(4-pentylcyclohexyl)carbonyl]-, phenylmethyl ester, [1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6- (phenylmethoxy)-5-[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester), [1S-[1R\*(trans),1(S\*),5S\*]]- (9CI) (CA INDEX NAME)

RN 160579-18-0 HCAPLUS

CN D-Allothreonine, N-[(4-butylphenyl)acetyl]-, phenylmethyl ester, [1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6-(phenylmethoxy)-5-[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester), [1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160705-77-1 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-(1-oxoheptyl)-L-allothreonine (9CI) (CA INDEX NAME)

RN 160705-78-2 HCAPLUS
CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-(1-oxoheptyl)-L-threonine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

$$HO_2C$$
 $R$ 
 $HO_2C$ 
 $HO_2C$ 

RN 160705-81-7 HCAPLUS

CN D-Threonine, N-(1-oxoheptyl)-, phenylmethyl ester, [1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6-(phenylmethoxy)-5-

[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester),
[1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160705-82-8 HCAPLUS

CN L-Allothreonine, N-(1-oxoheptyl)-, phenylmethyl ester,
[1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6(phenylmethoxy)-5-[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester),
[1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160705-83-9 HCAPLUS

CN L-Threonine, N-(1-oxoheptyl)-, phenylmethyl ester, [1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6-(phenylmethoxy)-5[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester),
[1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

RN 160705-84-0 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-(1-oxoheptyl)-D-allothreonine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160705-85-1 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-[(4-pentylcyclohexyl)carbonyl]-D-allothreonine, trans- (9CI) (CA INDEX NAME)

$$HO_2C$$
 $R$ 
 $HO_2C$ 
 $HO_2C$ 

RN 160705-86-2 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-[(4-butoxyphenyl)acetyl]-D-allothreonine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1981:66453 HCAPLUS

DOCUMENT NUMBER:

94:66453

TITLE:

Improving the solubility of biologically active agents

in water and in lower aliphatic alcohols, and

compounds having an improved solubility

INVENTOR(S):

Moehring, Edgar; Mueller, Hanns Peter; Roessler,

Peter; Wagner, Kuno; Tietz, Helmut

PATENT ASSIGNEE(S):

SOURCE:

Bayer A.-G., Fed. Rep. Ger.

Eur. Pat. Appl., 151 pp. CODEN: EPXXDW

DOCUMENT TYPE:

LANGUAGE:

Patent German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
EP 14263	A2	19800820		EP 1979-105407	19791231
EP 14263	AЗ	19800917			
EP 14263	B1	19820505			
R: BE, CH,	DE, FR	, GB, IT, NL	ı		
DE 2901060	A1	19800724		DE 1979-2901060	19790112
DE 2910356	A1	19800925		DE 1979-2910356	19790316
U\$ 46847 <del>2</del> 28	Α	19870804		US 1979-107976	19791228
IL 59099	A1	19840330		IL 1980-59099	19800109
DK 8000135	Α	19800713 .		DK 1980-135	19800111
BR 8000192	Α	19801021 .		BR 1980-192	19800111
PRIORITY APPLN. INFO.	:		DE	1979-2901060	19790112
			DE	1979-2910356	19790316
CT					

The soly. of biol. active materials (e.g. pesticides, herbicides, drugs) in water and lower alcs. is increased by treating such compds., contg. OH, NH, or NH2 groups, with hydrophilic polyethers reactive with such groups and having water uptake .gtoreq.15%. Thus, 600 g Bu(OCH2CH2)43OH was heated at 120.degree. with 3 mL BzCl, cooled to 90.degree., and stirred 25 min with 63.7 g Me 2,6-diisocyanatohexanoate to give 662 g BuO(CH2CH2O)43CONH(CH2)4CH(CO2Me)NCO (I) [75856-33-6]. A soln. of bis(4-chlorophenyl) isocyanurate [71809-41-1] in acetone was ślowly added to 22.1 g I in PhMe at 40.degree., giving 25.5 g product (II) [75856-34-7] with high soly. in water and lower alcs.

IT 75856-41-6P

RL: IMF (Industrial manufacture); PREP (Preparation) (manuf. of, with improved water and alc. soly.)

RN 75856-41-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[[[5-[[[2-[(dichloroacetyl)amino]-3-hydroxy-3-(4-nitrophenyl)propoxy]carbonyl]amino]-6-methoxy-6-oxohexyl]amino]carbonyl]-.omega.-butoxy-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-CH_2$$
 OBu-n

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L1

L2

L3

L5

L6

L7

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FILE 'REGISTRY' ENTERED AT 17:02:25 ON 11 JUN 2003
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                    STR L9
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L13
                80 S. LI4 FUL / 80 comple from Registry see of que stat"
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L15_
      FILE 'HCAPLUS' ENTERED AT 17:11:10 ON 11 JUN 2003
15 S L16 / 15 cits from CA Plus, basel on comple only call citi
1 S L17 AND ?BIORESPONS? (W) ?MODIF? AND ?CHEMOTHER? included because
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There are so yew)

FILE 'MEDLINE, BIOSIS, EMBASE, JICST-EPLUS' ENTERED AT 17:12:38 ON 11 JÚN

0 S L18 L19

FILE 'HCAPLUS' ENTERED AT 17:13:05 ON 11 JUN 2003

(FILE 'HOME' ENTERED AT 17:01:24 ON 11 JUN 2003)

2 S L17 AND ?CHEMOTHER? L20

1 S L17 AND ?BIORESPONS?(W)?MODIF? L21

2 S L17 AND ?CYTOKINE?(W)?INDUC?

1 S L17 AND (?MICROTUB? OR (?MACROPHAG? (W) ?ACTIVAT?) (W) AGENT). L24 3 S L20 OR L21 OR L22 OR L23/3 cets when combined with

FILE 'MEDLINE, BIOSIS, EMBASE, JICST-EPLUS' ENTERED AT 17:52:29 ON 11 JUN 0 S L24 ) O cit's from other databases

Hector, I didn't combine "method "Serms since There were so few hiss. Many Jane

Searched by Mary Jane Ruhl 605-1155

=> d que stat 117 / L14 STR.

NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE
L16 80 SEA FILE=REGISTRY SSS FUL L14
L17 15 SEA FILE=HCAPLUS ABB=ON L16

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=> d que stat 124
L14 STR
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O :::: C ~ NH ~ CH ~ CH ~ O ~ C ~ NH ~ CH ~ CH2 · CH2 · CH2 · CH ~ NH 1 2 3 4 5 6 7 8 9 10 11 12 13 14

NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

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	L20	2	SEA	FILE=HCAPLUS	ABB=ON	L17	AND	?CHEMOTHER?
	L21	1	SEA	FILE=HCAPLUS	ABB=ON	L17	AND	?BIORESPONS?(W)?MODIF?
	L22	2	SEA	FILE=HCAPLUS	ABB=ON	L17	AND	<pre>?CYTOKINE?(W)?INDUC?</pre>
	L23	1	SEA	FILE=HCAPLUS	ABB=ON	L17	AND	(?MICROTUB? OR (?MACROPHAG?(W)
			?ACI	TIVAT?) (W) AGE	NT)			
/	L24	3	SEA	FILE=HCAPLUS	ABB=ON	L20	OR I	L21 OR L22 OR L23 7

Inventor Secret

Reves 09/659,643R>11/06/2003

## => d ibib abs hitstr 17 1-1

ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS L7 ACCESSION NUMBER: 2001:208131 HCAPLUS

DOCUMENT NUMBER:

134:231861

TITLE:

Method of potentiating chemotherapy and treating solid

tumors

INVENTOR(S):

Gibbons, James Joseph, Jr., Dukart, Gary; Lucas, Judy; Speicher, Lisa

Anne

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

SOURCE:

PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

RN

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATEN	PATENT NO WO 2001019399 WO 2001019399			A2 20010322 A3 20011213				A.	PPLI	CATIO	DATE					
							WO 2000-US25008						20000912			
	V: AE,	AG,	AL,	AM,	AT,	AU,							BZ, GE,			
	•	-	-										LK, PL,			
	ZA,	ΖW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM	·	UG,	·	·	·
F		DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,		•	-
	BR 2000014001			A 20020521			GW, ML, MR, NE, SN, TD, TG BR 2000-14001 20000912 EP 2000-961841 20000912								•	
	R: AT,		CH,	DE,	DK,	ES,	FR,	GB,	GR,						MC,	PT,
JP 20 PRIORITY <i>F</i>	0035093 APPLN.		:				į	US 19	999-:	3960		Α	2000) 1999 2009	9/15		

MARPAT 134:231861

This invention provides a method of treating solid tumors which comprises administering an effective amt. of a combination of (1) a bieresponse modifier and (2) a chemotherapeutic agent. This invention also provides a method of potentiating the effects of a chemotherapeutic regimen in a mammal in need of treatment with such regimen which comprises administering a bioresponse modifier in addn. to a chemotherapeutic regimen. The potentiating effect of the bioresponse modifier  $[R-(R^*,R^*)]-N-[R-6-carboxy-N2-[(2-carboxy-1-methyl-2-[(1-rabox$ oxoheptyl)amino]ethoxy]carbonyl]-L-lysyl]alanine and paclitaxel was demonstrated in mice.

**50-07-7**, Mitomycin c **57-22-7**, Vincristine **865-21-4**, Vinblastine **11056-06-7**, Bleomycin 15663-27-1, Cisplatin 23214-92-8, Doxorubicin 25316-40-9, Adriamycin 33069-62-4, Paclitaxel 41575-94-4, Carboplatin 71486-22-1, Vinorelbine 114977-28-5, Docetaxel 160705-84-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(potentiating chemotherapy and treating solid tumors) 50-07-7 HCAPLUS

CN Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl, (laS,8S,8aR,8bS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 57-22-7 HCAPLUS

CN Vincaleukoblastine, 22-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 865-21-4 HCAPLUS

CN Vincaleukoblastine (6CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 11056-06-7 HCAPLUS

CN Bleomycin (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 15663-27-1 HCAPLUS

CN Platinum, diamminedichloro-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN 23214-92-8 HCAPLUS

CN 5,12-Naphthacenedione, 10-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-, (8S,10S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 25316-40-9 HCAPLUS

CN 5,12-Naphthacenedione, 10-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-(hydroxyacetyl)-

1-methoxy-, hydrochloride, (8S,10S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 33069-62-4 HCAPLUS

CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR, 4S, 4aS, 6R, 9S, 11S, 12S, 12aR, 12bS)-6, 12b-bis(acetyloxy)-12-(benzoyloxy)-2a, 3, 4, 4a, 5, 6, 9, 10, 11, 12, 12a, 12b-dodecahydro-4, 11-dihydroxy-4a, 8, 13, 13-tetramethyl-5-oxo-7, 11-methano-1H-cyclodeca[3, 4]benz[1, 2-b]oxet-9-ylester, (.alpha.R, .beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 41575-94-4 HCAPLUS

CN Platinum, diammine[1,1-cyclobutanedi(carboxylato-.kappa.O)(2-)]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN 71486-22-1 HCAPLUS

CN Aspidospermidine-3-carboxylic acid, 4-(acetyloxy)-6,7-didehydro-15[(2R,6R,8S)-4-ethyl-1,3,6,7,8,9-hexahydro-8-(methoxycarbonyl)-2,6-methano2H-azecino[4,3-b]indol-8-yl]-3-hydroxy-16-methoxy-1-methyl-, methyl ester,
(2.beta.,3.beta.,4.beta.,5.alpha.,12R,19.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

RN 114977-28-5 HCAPLUS

CN

Benzenepropanoic acid, .beta.-[[(1,1-dimethylethoxy)carbonyl]amino]-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-12b-(acetyloxy)-12-

#### Reyes 09/659,643R>11/06/2003

(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,6,11-trihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CAINDEX NAME)

#### Absolute stereochemistry.

RN 160705-84-0 HCAPLUS
CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-(1-oxoheptyl)-D-allothreonine (9CI) (CA INDEX NAME)

11/06/2003

#### => d ibib abs hitstr 124 1-3

L24 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:675821 HCAPLUS

137:222033 DOCUMENT NUMBER:

Compositions and methods for enhancing drug delivery TITLE:

across and into ocular tissues

Rothbard, Jonathan B.; Wender, Paul A.; McGrane, P. INVENTOR(S):

Leo; Sista, Lalitha Vs; Kirschberg, Thorsten A.

Cellgate, Inc., USA PATENT ASSIGNEE(S): PCT Int. Appl., 119 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. A1 20020906 WO 2002-US5804 20020225 \_\_\_\_\_ WO 2002067917 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20020912 US 2001-792480 20010223 US 2002127198 A1 US 2001-792480 A 20019223 US 1999-150510P P 19990824 PRIORITY APPLN. INFO.: US 2000-648400 A2 2000824

MARPAT 137:222033 OTHER SOURCE(S):

Compns. and methods for enhancing delivery of drugs, diagnostic and other agents across epithelial tissues, including into and across ocular tissues and blood-brain barrier are provided. The compns. and methods employ a delivery enhancing transporter that has sufficient guanidino or amidino side chain moieties to enhance delivery of a compd. conjugated to the reagent across one or more layers of the tissue, compared to the non-conjugated compd. The delivery-enhancing polymers include, for example, poly-arginine mols. that are preferably between about 6 and 25 residues in length. For example, a series of structural characteristics including sequence length, amino acid compn., and chirality that influence the ability of Tat49-57 to enter cells is identified. These characteristics provided the blueprint for the design of a series of novel peptoids, of which 17 members were synthesized and assayed for cellular uptake. This research established that the peptide backbone and hydrogen bonding along that backbone are not required for cellular uptake, that the quanidino head group is superior to other cationic subunits, and most significantly, that an extension of the alkyl chain between the backbone and the head group provides superior transporters. In addn. to better uptake performance, these novel peptoids offer several advantages over Tat49-57 including cost-effectiveness, ease of synthesis of analogs, and protease stability. These features along with their significant water soly. (>100 mg/mL) indicate that these novel peptoids could serve as effective transporters for the mol. delivery of drugs, drug candidates, and other agents into cells.

IT 455282-37-8P 455282-38-9P 455282-39-0P

## 455282-40-3P 455282-41-4P 455282-42-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug conjugates with peptide transporter contg. amidino or guanidino moieties for enhanced delivery across epithelium)

RN 455282-37-8 HCAPLUS

CN

L-Lysinamide, N2-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-l-oxopentyl]amino]-l-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-l-[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-l2-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,1l-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,1l-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

RN 455282-38-9 HCAPLUS

L-Lysinamide, N2-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

RN 455282-39-0 HCAPLUS

CN L-Lysinamide, N2-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-l-oxopentyl]amino]-l-oxohexyl]-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

RN 455282-40-3 HCAPLUS

CN L-Lysinamide, D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-N6-[2-[(1R,2S)-2-(benzoylamino)-1-[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

RN 455282-41-4 HCAPLUS
CN L-Lysinamide, D-arginyl-D-argi

yl]oxy]carbonyl]-2-phenylethoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 2-A

NH

RN 455282-42-5 HCAPLUS

CN L-Lysinamide, D-arginyl-D-arginyl

Absolute stereochemistry.

PAGE 1-A

$$H_{2N}$$
 $H_{2N}$ 
 $H$ 

## PAGE 1-B

# PAGE 2-A

## PAGE 3-A

$$\begin{array}{c|c} & \text{NH} & \text{(CH2)} \\ \text{H} & \text{R} & \text{R2} \end{array}$$

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS 5 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:208131 HCAPLUS

134:231861 DOCUMENT NUMBER:

Method of potentiating chemotherapy and TITLE:

treating solid tumors, Jr.; Dukart, Gary; Lucas Judy; INVENTOR(S):

Speicher, Lisa Anne

American Home Products Corporation, USA PATENT ASSIGNEE(S):

PCT Int. Appl., 23 pp. SOURCE: CODEN: PIXXD2

Patent DOCUMENT TYPE:

English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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APPLICATION NO.
                                                          DATE
    PATENT NO.
                     KIND DATE
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                   A2
                           20010322
                                         WO 2000-US25008
    WO 2001019399
                                                          20000912
                     A3
                           20011213
    WO 2001019399
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                                                          20000912
                      Т2
                           20030311
    JP 2003509383
                                      US 1999-396051 A 1999/09/15
PRIORITY APPLN. INFO.:
                                      WO 2000-US25008 W 20000912
```

OTHER SOURCE(S): MARPAT 134:231861

This invention provides a method of treating solid tumors which comprises administering an effective amt. of a combination of (1) a bioresponse modifier and (2) a chemotherapeutic agent. This invention also provides a method of potentiating the effects of a chemotherapeutic regimen in a mammal in need of treatment with such regimen which comprises administering a bioresponse modifier in addn. to a chemotherapeutic regimen. potentiating effect of the bioresponse modifier  $[R-(R^*,R^*)]-N-[R-6-carboxy-N2-[[2-carboxy-1-methyl-2-[(1-carboxy$ oxoheptyl)amino]ethoxy]carbonyl]-L-lysyl]alanine and paclitaxel was demonstrated in mice.

TΤ 160705-84-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(potentiating chemotherapy and treating solid tumors)

160705-84-0 HCAPLUS RN

D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with CN N-(1-oxoheptyl)-D-allothreonine (9CI) (CA INDEX NAME)

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DOCUMENT NUMBER:

122:106538

TITLE:

Preparation of peptide urethane and urea derivatives

that induce cytokine production

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(115	5312831	_	A	19940517		US	1993-6317	4	19930512		
	5545662		A	19960813			1994-2133		19940314		
	652228		A1	19950510			1994-1061		19940420		
	652228		B1	19961023							
					FR.	GB. C	GR, IE, IT	. LI.	LU. NL.	PT,	SE
ΑТ	144533		,, E	19961115	,		1994-1061		19940420	•	
	2094004		T3	19970101			1994-1061		19940420		
	290445		в6 <sup>-</sup>	20020717			1994-981		19940422		
	281120		B6	20001211			1994-491		19940428		
	67038			19950130			1994-1444		19940506		
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OTHER SOURCE(S):

MARPAT 122:106538

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Α

Title compds. [I; R1, R3, Ra = H, (substituted) alkyl, cycloalkyl, cycloalkylalkyl, vinyl, acetylene, amino, acylamino, aryl, aralkyl, aryloxy, heterocyclyl, etc.; R2, Rb, Rc = (protected) carboxy, carboxylalkyl, carboxamide; X = O, S; R4 = H, protecting group], were prepd. Thus, [R-(R\*,R\*)]-N-(R)-6-carboxy-N2-[[2-carboxy-1-methyl-2-[(1-oxoheptyl)amino]ethoxy]carbonyl]lysyl-D-alanine (soln. phase prepn. given) at 0.1 mg/kg s.c. in mice induced 4802 U/mL of IL-6. I may be useful in the treatment of cancer, AIDS, aplastic anemia, myelodysplastic syndrome, infectious disease, and in the enhancement of immune response.

111 160578-69-8P 160578-70-1P 160578-71-2P 160578-72-3P 160578-73-4P 160579-15-7P 160579-16-8P 160579-17-9P 160579-18-0P 160705-77-1P 160705-78-2P 160705-79-3P 160705-81-7P 160705-82-8P 160705-83-9P 160705-84-0P 160705-85-1P 160705-86-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, for induction of cytokine prodn.)

RN 160578-69-8 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-(1-oxoheptyl)-D-threonine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$O$$
 $Me$ 
 $O$ 
 $S$ 
 $R$ 
 $CO_2H$ 
 $O$ 
 $HN$ 
 $O$ 
 $CH_2)_5$ 
 $Me$ 
 $Me$ 

RN 160578-70-1 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-(1-oxoheptyl)-D-serine (9CI) (CA INDEX NAME)

RN 160578-71-2 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-[(4-pentylcyclohexyl)carbonyl]-L-threonine, (trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$HO_2C$$
 $R$ 
 $HO_2C$ 
 $HO_2C$ 

RN 160578-72-3 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-[(4-butoxyphenyl)acetyl]-L-threonine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160578-73-4 HCAPLUS

CN D-Alanine, N-[(R)-6-carboxy-N2-[[1-[carboxy[(1-oxoheptyl)amino]methyl]propoxy]carbonyl]-L-lysyl]-, [R-(R\*,R\*)]- (9CI)

(CA INDEX NAME)

Absolute stereochemistry.

$$HO_2C$$
 $R$ 
 $HO_2C$ 
 $HO_2C$ 

RN 160579-15-7 HCAPLUS

CN D-Allothreonine, N-(1-oxoheptyl)-, phenylmethyl ester,
[1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6(phenylmethoxy)-5-[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester),
[1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160579-16-8 HCAPLUS

CN D-Serine, N-(1-oxoheptyl)-, phenylmethyl ester, [1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6-(phenylmethoxy)-5[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester),
[1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

RN 160579-17-9 HCAPLUS

CN D-Allothreonine, N-[(4-pentylcyclohexyl)carbonyl]-, phenylmethyl ester, [1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6-(phenylmethoxy)-5-[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester), [1S-[1R\*(trans),1(S\*),5S\*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160579-18-0 HCAPLUS

CN D-Allothreonine, N-[(4-butylphenyl)acetyl]-, phenylmethyl ester,
[1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6(phenylmethoxy)-5-[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester),
[1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

RN 160705-77-1 HCAPLUS
CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with
 N-(1-oxoheptyl)-L-allothreonine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160705-78-2 HCAPLUS
CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with
 N-(1-oxoheptyl)-L-threonine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160705-79-3 HCAPLUS

CN D-Alanine, N-[(R)-6-carboxy-N2-[[1-[carboxy-1-[(1-oxoheptyl)amino]methyl]propoxy]carbonyl]-L-lysyl]-, [S-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$HO_2C$$
 $R$ 
 $HO_2C$ 
 $HO_2C$ 

RN 160705-81-7 HCAPLUS

CN D-Threonine, N-(1-oxoheptyl)-, phenylmethyl ester, [1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6-(phenylmethoxy)-5[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester),
[1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160705-82-8 HCAPLUS

CN L-Allothreonine, N-(1-oxoheptyl)-, phenylmethyl ester,
[1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6(phenylmethoxy)-5-[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester),
[1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

RN 160705-83-9 HCAPLUS

L-Threonine, N-(1-oxoheptyl)-, phenylmethyl ester, [1-[[[1-methyl-2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-6-oxo-6-(phenylmethoxy)-5[[(phenylmethoxy)carbonyl]amino]hexyl]carbamate (ester),
[1S-[1R\*(S\*),5S\*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160705-84-0 HCAPLUS

CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with N-(1-oxoheptyl)-D-allothreonine (9CI) (CA INDEX NAME)

HO<sub>2</sub>C R (CH<sub>2</sub>) 
$$\stackrel{\bigcirc}{_{3}}$$
 S O HN (CH<sub>2</sub>)  $\stackrel{\bigcirc}{_{5}}$  Me

RN 160705-85-1 HCAPLUS
CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with
N-[(4-pentylcyclohexyl)carbonyl]-D-allothreonine, trans- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$HO_2C$$
 $R$ 
 $HO_2C$ 
 $HO_2C$ 

RN 160705-86-2 HCAPLUS
CN D-Alanine, N-[(R)-N2,6-dicarboxy-L-lysyl]-, N2-ester with
N-[(4-butoxyphenyl)acetyl]-D-allothreonine (9CI) (CA INDEX NAME)